

Psychology of Exceptional Learning

What is Educational psychology ?

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What is Educational psychology ? The study of learning, that is, the change in knowledge at the personal level. It differs from Ed Soc that looks at the change in knowledge at the cultural level, how cultural and social factors affect learning

- learning; the change in knowledge at the personal level how it occurs, the change process
- learners, the learner factors that influence learning
- teaching, issues to do with pedagogy, instruction

Examples of educational psychology

- understanding personal knowledge and the processes by which it changes eg cognitive style
- understanding, managing and improving change processes, for example, in psychotherapy and coping, in institutions undergoing change, in learning to deal with different client bases, in learning to deal with changed modes of operating (eg with Net)
- improving the quality and effectiveness of instruction at school level, in industry,
- designing instructional materials that facilitate learning, eg in academic learning in schools, in drug education, in parent education
- evaluating instructional units
- reducing student disengagement from learning and student alienation, examining issues to do with motivation and attitudes, attitudinal learning
- understanding and dealing with individual differences in learning, learning difficulties
- improving self-learning knowledge
- improving performance, eg in sports psychology, in decision making
- improving procedures for assessing knowledge, for monitoring learning outcomes

Components of educational psychology

How learners change: within-learner processes <ul style="list-style-type: none"> • learner knowledge - basis for change: information processing models • developmental theories : Piaget • learner characteristics that influence change • managing, regulating self-learning 	Individual differences in learning; <ul style="list-style-type: none"> • types of individual difference • exceptional learning 	Group, cultural, social influences on individual learning : Vygotsky, Skinner, Bruner
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Learners and their characteristics that affect learning

- physical and physiological
- moral / value
- social-interactional
- cognitive
- emotional/ personality
- approach to learning

Educational psychology

Pedagogy, teachers and teaching	Learning
Teachers' beliefs about learning and teaching	Theories of learning: how knowledge changes
Matching teaching and learning, accommodating learners' needs in the teaching	Monitoring and describing changes in knowledge; assessment and evaluation
Effective learning environments	Motivating learning
How teacher /instruction interprets content matter: <ul style="list-style-type: none"> • structure of the discipline • the basic concepts of the content • how the ideas are sequenced for teaching • prioritising content, specialised content 	Conditions facilitating learning

The development of Educational psychology

Developed in two 'camps'

Psychology
John Watson

Education
John Dewey
William James

What theories inform Educational psychology how are their common, differ

Theories in Educational psychology

A theory is a set of principles that are based on observations and that explain and relate certain phenomena. Principles - relationships between underpinning concepts, for example, the factors that influence learning

In Educational psychology types of theories include

- theories of learning
- theories of pedagogy - instruction
- theories of education

These are different from sets of beliefs.

What theories drive / inform our teaching - Implicit theories of learning, teaching and education

How do we tell if our theories are adequate ? Try them out - see if they work - research them.

Event -	teacher acts <-----	decision made by teacher <--	teacher's theory informed decision
Misbehave	reprimand ignore	I need to reprimand	punish act stops it from happening again ignoring means not giving attention
Difficulty reading words	sound out use context		

Theories in Educational psychology need to help us operate, make decisions

- critically, selectively , take account of the major key factors in a learning situation
- practically, efficiently
- in creative, novel ways so that we can transfer and use knowledge as widely as possible

How can teachers collect data about what works

- keep record of which teaching behaviours enhance / inhibit learning
- videotape/ audiotape lessons and analyse
- teacher-mirror
- analyse student output in terms of teaching approach

Research in Educational psychology

Key types of questions asked by research

- Under what conditions does change in knowledge occur ?
- What factors affect the change process
- What extent of change might you expect ?
- Which teaching was most effective ?
- How does approach to learning differ in a sample; individual differences>

How learning outcomes are described in Ed Psych Learning outcomes are described in two ways

- their quality - what they are like - qualitative descriptions

- their quantity - how many of them in a given time, how often, quantitative descriptions. This use has led many educators to see educational psychology to be overly concerned with psychometric assessments, testing, placing numbers on students, comparing students with norms, etc.
- Components of both are necessary.

Types of research

- laboratory experiments - easy to control the factors (variables)- may be correlational , longitudinal, survey, intervention treatment studies
- field experiments - naturalistic - high validity
- single case studies - use base line behaviours -see what works for individual students. In some situations students can gather data for you
- descriptive research - case studies -ethnographic studies

How does Educational psychology influence teaching ?

- informs decision making
- recommends clusters of procedures

Areas in which Educational psychology operates today

- wherever there is an interest in the change /learning process, educational psychology is relevant
- assessing the usefulness, validity of educational programs
- how the culture sees education has broadened - parent education, TAFE, sports psychology